Meeting Arizona College and Career Ready Standards for Special Educators

January 7-8

Day 1

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Introductions

Logistics

Overview of the Training

Who's here?

Training Outcomes

- Expand understanding of the AZCCRS for ELA/Literacy and Mathematics in order to develop standards-aligned IEP goals aligned to the students' AZCCRS present levels of academic achievements and functional performance (PLAAFP)

- Integrate research of how children learn in order to identify areas of need in the development of IEP goals

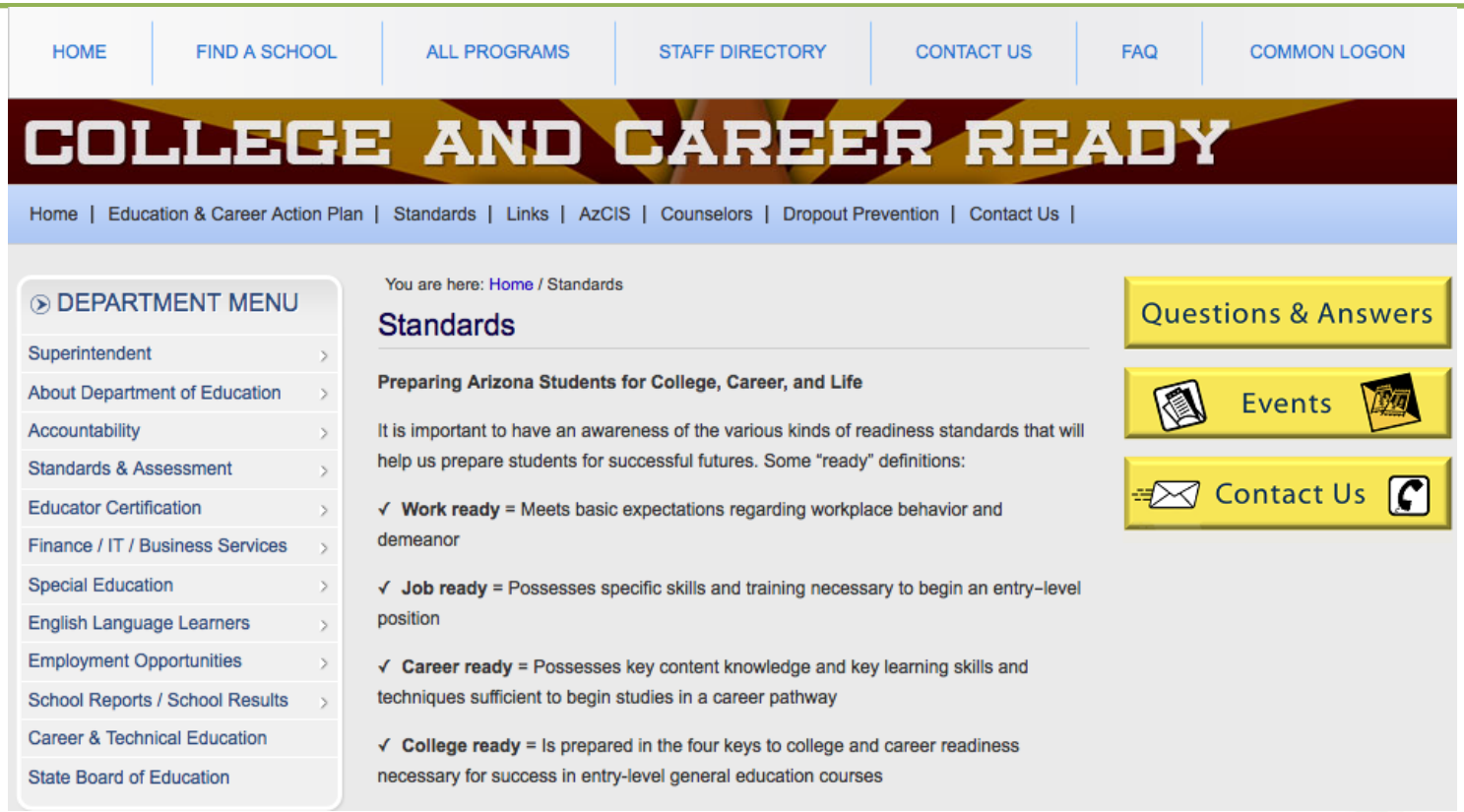
Training Outcomes

- Obtain a solid understanding of Universal Design for Learning (UDL) to integrate learning into daily practice
- Develop and write standards-aligned IEP goals related to students' needs as described in the PLAAFP
- Explore and use readily available resources, tools, and evidenced-based strategies to support students with disabilities to access the AZCCRS in ELA/Literacy and Mathematics

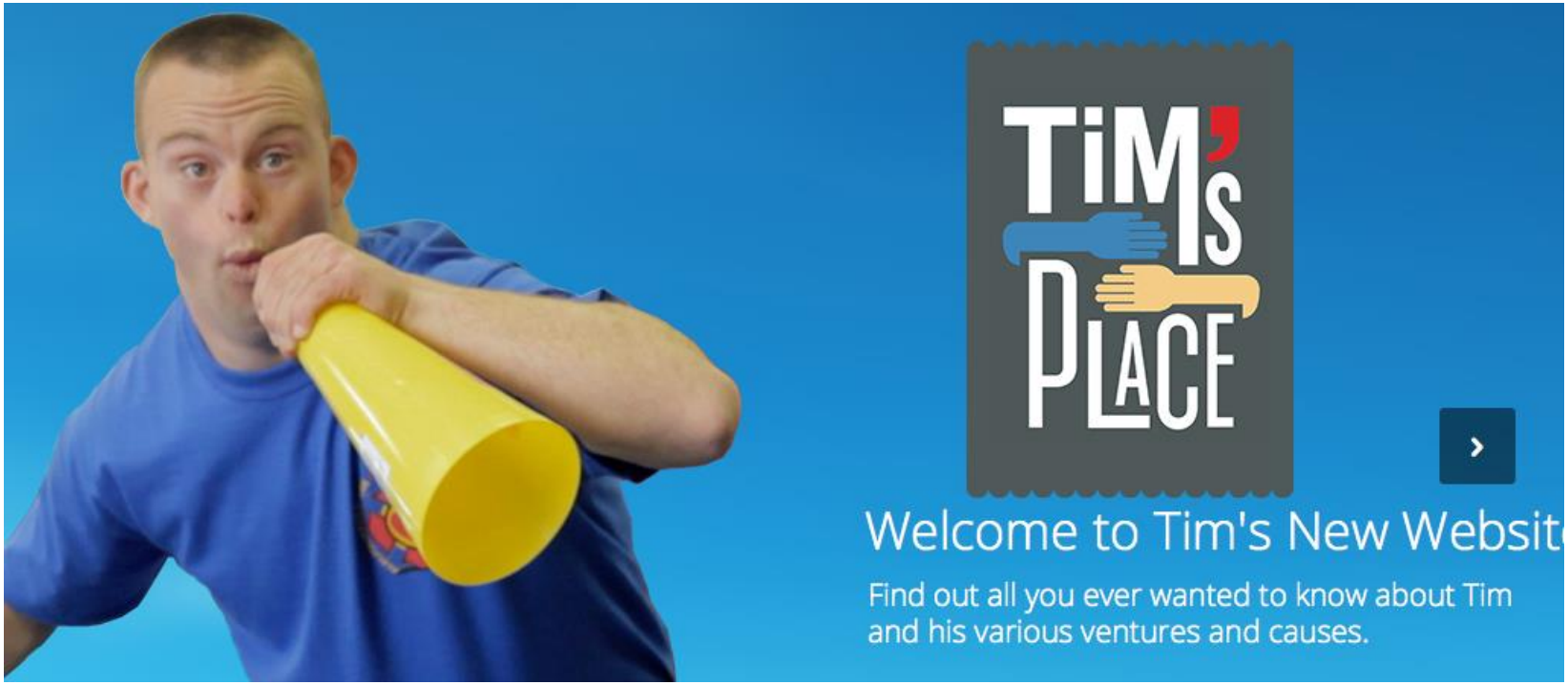
Preparing Arizona's Students for College and Career Success

ARIZONA'S COLLEGE AND CAREER READY STANDARDS

Arizona College and Career Ready Standards



“Skills” Defined



College and Career Ready Jigsaw Reading Groups

- The colleagues at your table are members of your **HOME** group. Each person in your **HOME** group will be assigned one article that describes what College and Career Ready means to read and understand, with the purpose of explaining the content to the rest of your group.
- **Purpose for reading:** As you read your section, highlight or underline information that guides you and your colleagues to understanding what College and Career Ready means, and what are the implications for Students with Disabilities.

College and Career Ready Jigsaw Reading Groups

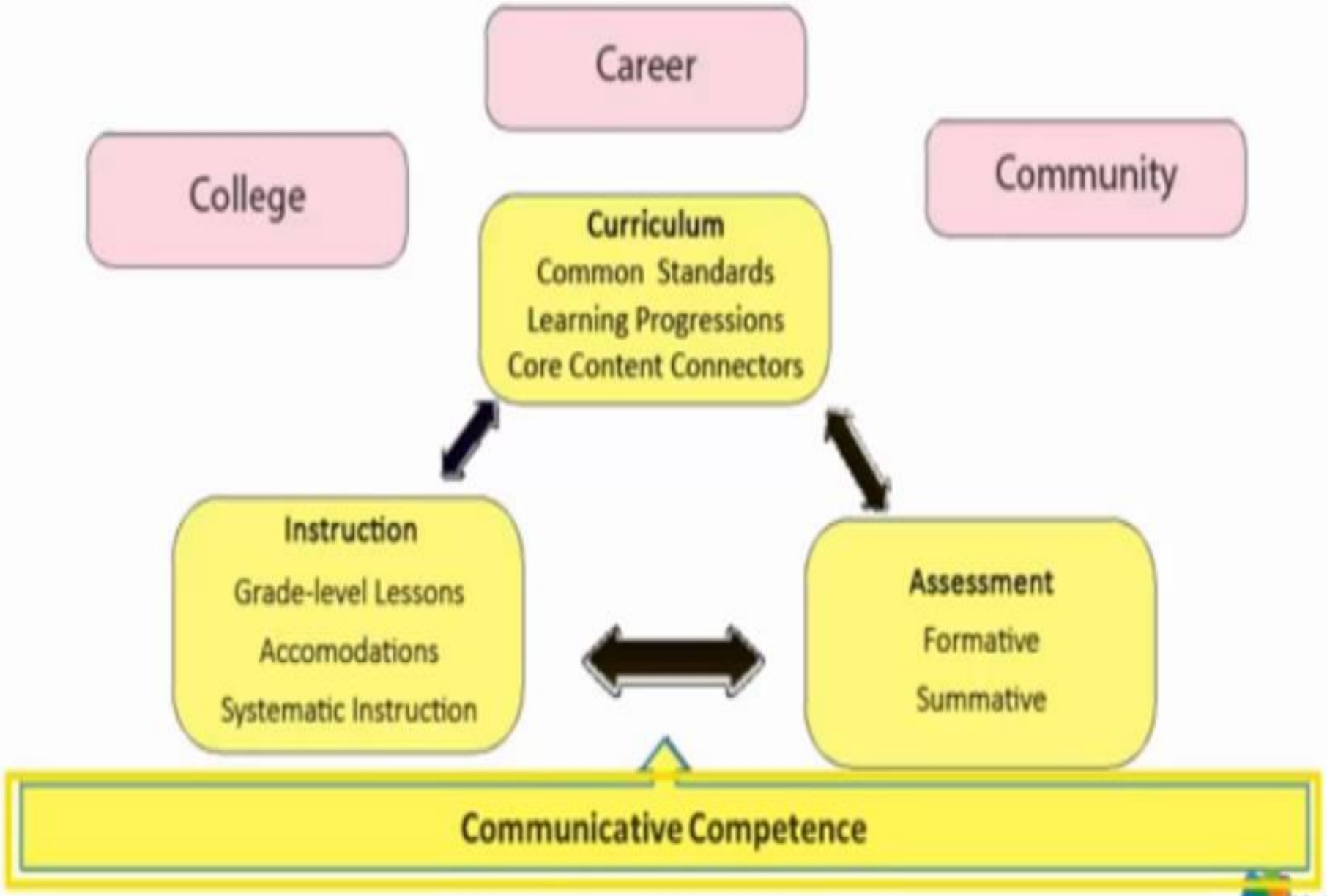
Reading Sections:

1.AZCCRS College and Career Ready Descriptors
2.David Conley article
3.CTE CCR
4.Standards for Mathematical Practices
5.NCSC College, Career, and Community Ready

You will read your section along with others who are reading the same section. Prepare to discuss your section to further your understanding of the important information you should share with your **HOME** group.

Implicit Building Blocks

- Communicative Competence
- Self-Advocacy
- Self-Determination
- Executive Functions
- Social/Emotional Skills
- AZCCRS-Aligned Behaviors/Expectations


Career
College
Community
Curriculum
Common Standards
Learning Progressions
Core Content Connectors
Instruction
Grade-level Lessons
Accomodations
Systematic Instruction
Assessment
Formative
Summative
Communicative Competence

NCSC – Commitment to Communicative Competence

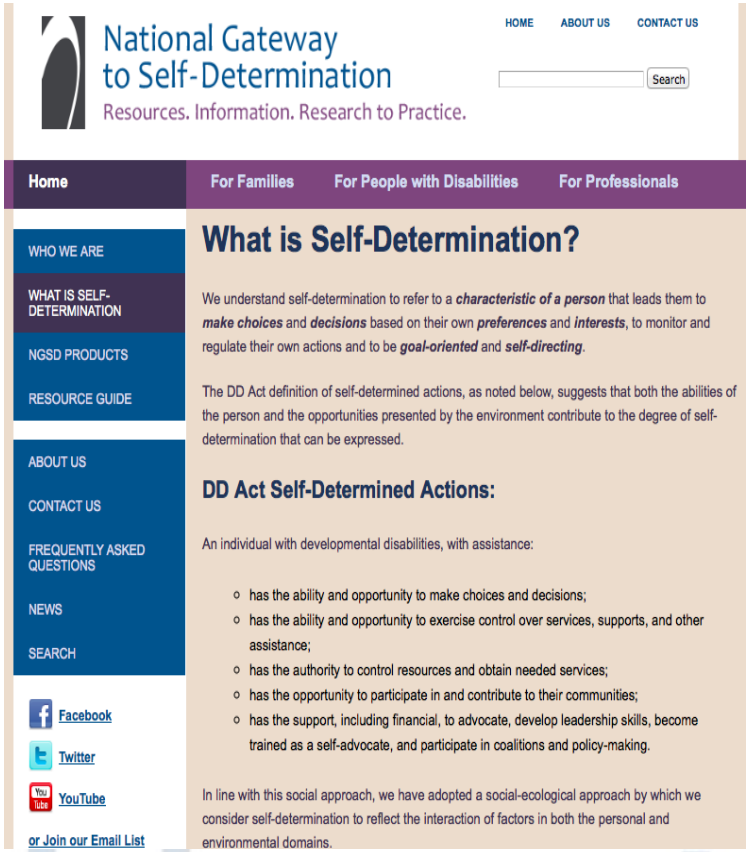
Communication at some level is possible and identifiable for all students regardless of functional "level," and is the starting point for developing communicative competence. Communication competence is defined as the use of a communication system that allows students to gain and demonstrate knowledge. Many people with severe speech or language problems rely on alternative forms of communication, including augmentative and alternative communication (AAC) systems, to use with existing speech or replace difficult to understand speech.

http://www.ncscpartners.org/Media/Default/PDFs/Resources/Parents/NCSC-Communicative-Competence-9-10-13.pdf

Self-Advocacy

http://www.selfadvocacyonline.org/learning/

Self-Determination



…a characteristic of a person that leads them to make choices and decisions based on their own preferences and interests, to monitor and regulate their own actions and to be goal-oriented and self-directing.

http://www.ngsd.org/everyone/what-self-determination

Executive Functions

Executive function is a set of mental processes that helps connect past experience with present action. People use it to perform activities such as planning, organizing, strategizing, paying attention to and remembering details, and managing time and space. (NCLD)

http://www.ncld.org/types-learning-disabilities/executive-function-disorders/what-is-executive-function

Social/Emotional Learning

www.casel.org

Social and emotional learning (SEL) is the process through which children and adults acquire and effectively apply the knowledge, attitudes and skills necessary to understand and manage emotions, set and achieve positive goals, feel and show empathy for others, establish and maintain positive relationships, and make responsible decisions.

AZCCRS-Aligned Behaviors/Expectations

Introducing, modeling, and reinforcing positive social behavior is an important step of a student's educational experience. Teaching behavioral expectations and rewarding students for following them is a much more positive approach than waiting for misbehavior to occur before responding.

www.PBIS.org

Making Mistakes/Failure

But what if I fail?

You will.

The answer to the what if question is, you will.

A better question might be, "after I fail, what then?"

Well, if you've chosen well, after you fail you will be one step closer to succeeding, you will be wiser and stronger and you almost certainly will be more respected by all of those that are afraid to try.

Seth Godin *Linchpin: Are You Dispensible?*
Blog: http://sethgodin.typepad.com

Crosswalk of Common Core Instructional Shifts: ELA/Literacy

Both the 6 instructional shifts articulated by the NY State Department of Education and the 3 instructional shifts outlined by Student Achievement Partners help educators understand the major changes required by the Common Core in terms of curricular materials and classroom instruction in ELA/Literacy and Mathematics.

6 Shifts: EngageNY www.engageny.org	**3 Shifts:** Student Achievement Partners www.achievethecore.org
1: PK-5, Balancing Informational & Literary Texts: Students read a true balance of **informational** and **literary** texts. Elementary school classrooms are, therefore, places where students **access the world – science, social studies, the arts** and **literature** – through text. At least 50% of what students read is **informational**.	**1: Building knowledge** through **content-rich nonfiction** and **informational texts**
2: 6-12, Knowledge in the Disciplines: Content area teachers outside of the ELA classroom **emphasize literacy experiences** in their planning and instruction. Students learn through **domain-specific texts** in **science and social studies** classrooms – rather than referring to the text, they are expected to learn from what they read.	
4: Text-based Answers: Students have **rich and rigorous conversations** which are dependent on a common text. Teachers insist that classroom experiences stay **deeply connected to the text** on the page and that students develop habits for making **evidentiary arguments** both in conversation, as well as in writing to **assess comprehension of a text**.	**2:** Reading and writing grounded in **evidence from text**
5: Writing from Sources: Writing needs to **emphasize use of evidence** to **inform** or **make an argument** rather than the personal narrative and other forms of decontextualized prompts. While the narrative still has an important role, students develop skills through **written arguments** that **respond to** the **ideas, events, facts,** and **arguments** presented in the texts they read.	
3: Staircase of Complexity: In order to prepare students for the **complexity of college and career ready texts**, each grade level requires a "**step" of growth on the "staircase**". Students read the **central, grade appropriate text** around which instruction is centered. Teachers are **patient**, create **more time** and **space** in the curriculum for this **close and careful reading**, and provide appropriate and necessary **scaffolding** and **supports** so that it is possible for students reading below grade level.	**3:** Regular practice with **complex text** and its **academic vocabulary**
6: Academic Vocabulary: Students constantly **build** the **vocabulary** they need to **access grade level complex texts**. By focusing strategically on **comprehension of pivotal and commonly found words** (such as "discourse," "generation," "theory," and "principled") and less on esoteric literary terms (such as "onomatopoeia" or "homonym"), teachers **constantly build students' ability to access more complex texts** across the content areas.	

Arizona College & Career Ready Standards (AZCCRS)

ARIZONA'S
COLLEGE AND CAREER READY STANDARDS

Arizona's College and Career Ready Standards

ELA and Literacy in History/Social Studies, Science, and Technical Subjects

Mathematics

Kindergarten – 12th Grade

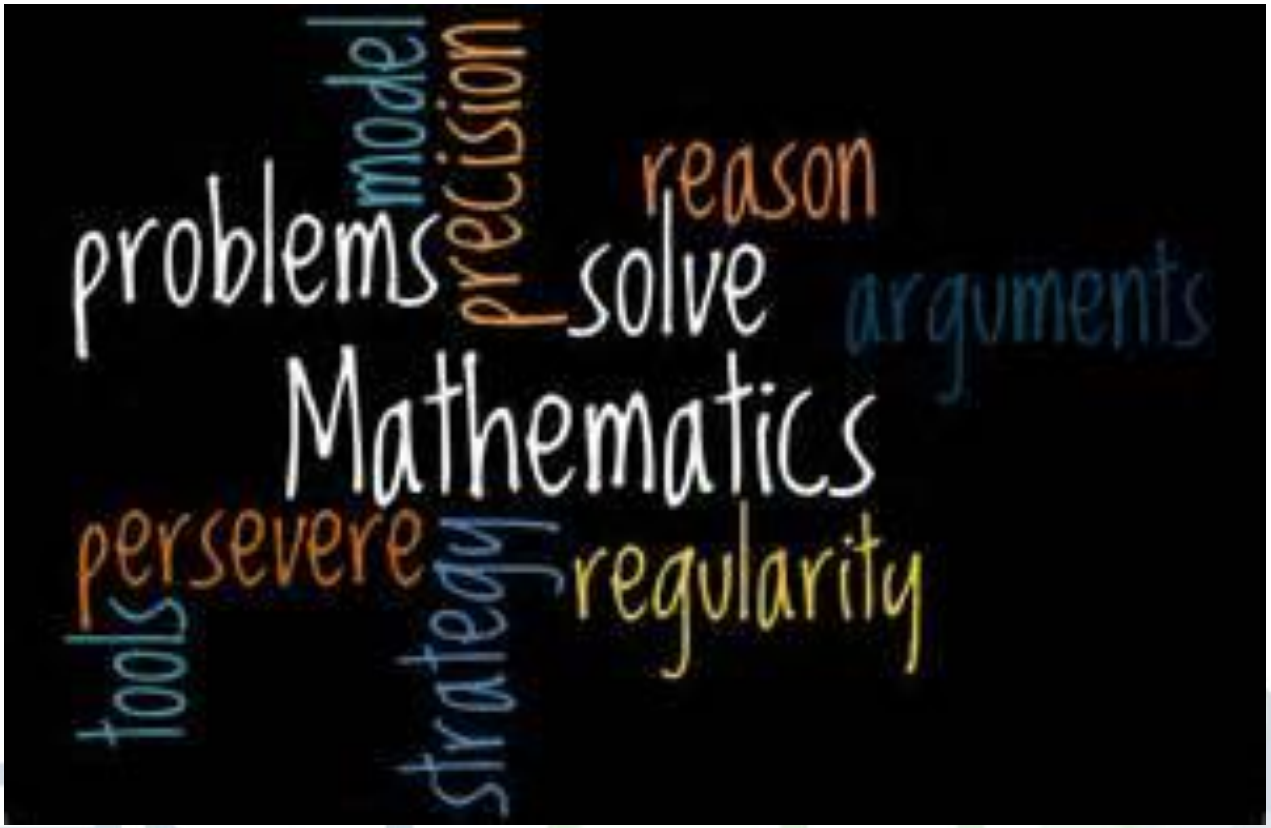
ARIZONA DEPARTMENT OF EDUCATION
HIGH ACADEMIC STANDARDS FOR STUDENTS
State Board Approved June 2010
October 2013 Publication

Measureable Annual Goals - Review

- Choose a AZCCRS standard for a grade level you teach.
- Find that standard in the color-coded ELA document.
- How do the following topics integrate into the standards/IEP Development?
  1. Communicative Competence
  2. Self-Advocacy
  3. Self-Determination
  4. Executive Functions
  5. Social/Emotional Learning
  6. AZCCRS-Aligned Behaviors/Expectations

Learning Mathematics in the 21st Century

Math needs a makeover



Crosswalk of Common Core Instructional Shifts: Mathematics

6 Shifts: EngageNY www.engageny.org		**3 Shifts:** Student Achievement Partners www.achievethecore.org
1: Focus: Teachers use the power of the eraser and significantly **narrow and deepen** the **scope** of how time and energy is spent in the math classroom. They do so in order to **focus deeply** on only the **concepts** that are **prioritized in the standards** so that students reach **strong foundational knowledge** and **deep conceptual understanding** and are able to **transfer mathematical skills** and understanding **across concepts and grades**.	=	**1: Focus** strongly where the Standards focus
2: Coherence: Principals and teachers **carefully connect** the **learning within and across grades** so that, for example, fractions or multiplication spiral across grade levels and **students can build new understanding onto foundations** built in previous years. Teachers can begin to count on **deep conceptual understanding of core content** and build on it. Each standard is not a new event, but an **extension of previous learning**.	=	**2: Coherence**: **Think** across grades, and **link** to major topics within grades
3: Fluency: Students are expected to have **speed and accuracy** with simple calculations; teachers structure class time and/or homework time for students to **memorize**, through repetition, **core functions** (found in the attached list of fluencies) such as multiplication tables so that they are **more able to understand** and **manipulate more complex concepts**.		
4: Deep Understanding: Teachers teach more than "how to get the answer" and instead support students' ability to **access concepts** from a **number of perspectives** so that students are able to see math as more than a set of mnemonics or discrete procedures. Students **demonstrate deep conceptual understanding** of **core math concepts** by **applying** them to **new situations** as well as **writing and speaking about their understanding**.		
5: Application: Students are expected to use math and **choose the appropriate concept for application** even when they are not prompted to do so. Teachers provide opportunities at all grade levels for students to **apply math concepts in "real world" situations**. Teachers in **content areas** outside of math, particularly science, ensure that students are using math – at all grade levels – to **make meaning of and access content**.	=	**3: Rigor**: Require **fluency**, **application**, and **deep understanding**
6: Dual Intensity: Students are **practicing and understanding**. There is more than a balance between these two things in the classroom – both are occurring with intensity. Teachers create opportunities for students to participate in "drills" and make use of those skills through **extended application of math concepts**. The amount of time and energy spent **practicing and understanding** learning environments is driven by the specific **mathematical concept** and therefore, varies throughout the given school year.		

College and Career Ready

8 Mathematical Practices

- Make Sense of Problems and Persevere in Solving Them
- Reason Abstractly and Quantitatively
- Construct Viable Arguments and Critique the Reasoning of Others
- Model with Mathematics
- Use Appropriate Tools Strategically
- Attend to Precision
- Look For and Make Use of Structure
- Look For and Express Regularity in Repeated Reasoning

The Standards for Mathematical Practice describe characteristics and traits that mathematics educators at all levels should seek to develop in their students. These practices rest on important "processes and proficiencies" with longstanding importance in mathematics education. The first of these are the NCTM process standards of problem solving, reasoning and proof, communication, representation, and connections. The second are the strands of mathematical proficiency specified in the National Research Council's report *Adding It Up*: adaptive reasoning, strategic competence, conceptual understanding (comprehension of mathematical concepts, operations and relations), procedural fluency (skill in carrying out procedure flexibly, accurately, efficiently and appropriately), and productive disposition (habitual inclination to see mathematics as sensible, useful, and worthwhile, coupled with a belief in diligence and one's own efficacy).

Overarching Habits of Mind of a Productive Mathematical Thinker	
MP.1 Make sense of problems and persevere in solving them. MP.6 Attend to precision.	***Reasoning and Explaining***
	MP. 2 Reason abstractly and quantitatively.
	MP. 3 Construct viable arguments and critique the reasoning of others.
	Modeling and Using Tools
	MP. 4 Model with mathematics.
	MP. 5 Use appropriate tools strategically.
	Seeing Structure and Generalizing
	MP. 7 Look for and make use of structure.
	MP. 8 Look for and express regularity in repeated reasoning.

http://www.azed.gov/wp-content/uploads/PDF/MathOverview.pdf

Overview of the 2010 Mathematics Standards (Common Core State Standards)

The 2010 Mathematics Standards provide a consistent, clear understanding of what students are expected to learn, so teachers and parents know what they need to do to help them. The standards are focused, coherent, and relevant to the real world, describing the knowledge and skills that students need for success in college and careers.

In K-8 (Kindergarten, Elementary, and Middle School) each *grade* contains work on several *domains*, as described in the table below. For example: In Grade 1, the content includes Operations and Algebraic Thinking, Number and Operations in Base Ten, Measurement and Data, and Geometry.

Grade	K	1	2	3	4	5	6	7	8	HS Conceptual Categories
Domains	Counting & Cardinality						Ratios & Proportional Relationships		Functions	Functions
	Operations and Algebraic Thinking						Expression and Equations			Algebra
	Number and Operations in Base Ten						The Number System			Number & Quantity
				Fractions						
	Measurement and Data						Statistics and Probability			Statistics & Probability
	Geometry						Geometry			Geometry

In High School, the standards are arranged in *conceptual categories*, such as Algebra or Functions. In each conceptual category there are *domains*, such as Creating Equations and Interpreting Functions.

Conceptual Category	Number & Quantity	Algebra	Functions	Geometry	Statistics & Probability
Domains	The Real Number System	Seeing Structure in Expressions	Interpreting Functions	Congruence	Interpreting Categorical & Quantitative Data
	Quantities	Arithmetic with Polynomials & Rational Expressions	Building Functions	Similarity, Right Triangles, & Trigonometry	Making Inferences & Justifying Conclusions
	The Complex Number System	Creating Equations	Linear, Quadratic, & Exponential Models	Expressing Geometric Properties with Equations	Conditional Probability & the Rules of Probability
	Vector & Matrix Quantities	Reasoning with Equations & Inequalitites	Trigonometric Functions	Geometric Measurement & Dimension	Using Probability to Make Decisions

http://www.azed.gov/wp-content/uploads/PDF/MathOverview.pdf

AZCCRS Mathematics Coding

Revision to AZCCRS-Mathematics coding.
Addition of a capital letter to represent each Cluster.

Based on a revision to coding by CCSS and PARCC, AZCCRS-Mathematics standards have been revised to reflect the new coding for Arizona's College and Career Ready Mathematics Standards. The change in coding involves the addition of a capital letter to represent each cluster. ***There is no urgency for schools/districts to revise this coding in their documents.***

Example – Grades K-8

Arizona's College and Career Ready Summary of Changes – Mathematics – 5th Grade

GRADE 5			
Removed	**Moved to a Different Grade Level**	**Moved from another Grade Level**	**New Standards**
M05-S2C1-01 (2008) Collect, record, organize, and display data using multi-bar graphs or double line graphs.	M05-S1C1-01 (2008) Determine equivalence by converting between benchmark fractions, decimals, and percents. REDISTRIBUTED TO 4.NF.C.6 AND AZ6.NS.C.9	M03-S3C2-01 (2008) & M04-S3C1-01 (2008) MOVED TO 5.OA.B.3 Generate two numerical patterns using two given rules. Identify apparent relationships between corresponding terms. Form ordered pairs consisting of corresponding terms from the two patterns, and graph the ordered pairs on a coordinate plane. *For example, given the rule "Add 3" and the starting number 0, and given the rule "Add 6" and the starting number 0, generate terms in the resulting sequences, and observe that the terms in one sequence are twice the corresponding terms in the other sequence. Explain informally why this is so.*	5.OA.A.2 Write simple expressions that record calculations with numbers, and interpret numerical expressions without evaluating them. *For example, express the calculation "add 8 and 7, then multiply by 2" as $2\times(8+7)$. Recognize that $3\times(18932+921)$ is three times as large as 18932+921, without having to calculate the indicated sum or product.*

http://www.azed.gov/azccrs/files/2013/11/mathgr5changes_11_2013.pdf

Grade Level Placemats

Arizona's College and Career Ready Standards – Mathematics – 5th Grade Stand

Developing fluency with addition and subtraction of fractions, developing understanding of the multiplication of fractions and of division of fractions in limited cases (unit fractions divided by whole numbers and whole numbers divided by unit fractions)

- Students apply their understanding of fractions and fraction models to represent the addition and subtraction of fractions with unlike denominators as equivalent calculations with like denominators. They develop fluency in calculating sums and differences of fractions, and make reasonable estimates of them. Students also use the meaning of fractions, of multiplication and division, and the relationship between multiplication and division to understand and explain why the procedures for multiplying and dividing fractions make sense. (Note: this is limited to the case of dividing unit fractions by whole numbers and whole numbers by unit fractions.)

Extending division to 2-digit divisors, integrating decimal fractions into the place value system and developing understanding of operations with decimals to hundredths, and developing fluency with whole number and decimal operation

- Students develop understanding of why division procedures work based on the meaning of base-ten numerals and properties of operations. They finalize fluency with multi-digit addition, subtraction, multiplication, and division. They apply their understandings of models for decimals, decimal notation, and properties of operations to add and subtract decimals to hundredths. They develop fluency in these computations, and make reasonable estimates of their results. Students use the relationship between decimals and fractions, as well as the relationship between finite decimals and whole numbers (i.e., a finite decimal multiplied by an appropriate power of 10 is a whole number), to understand and explain why the procedures for multiplying and dividing finite decimals make sense. They compute products and quotients of decimals to hundredths efficiently and

observe that the terms in one sequence are twice the corresponding terms in the other sequence. Explain informally why this is so.

Number and Operations in Base Ten - Understand the place value system.

5.NBT.A.1: Recognize that in a multi-digit number, a digit in one place represents 10 times as much as it represents in the place to its right and 1/10 of what it represents in the place to its left.

5.NBT.A.2: Explain patterns in the number of zeros of the product when multiplying a number by powers of 10, and explain patterns in the placement of the decimal point when a decimal is multiplied or divided by a power of 10. Use whole-number exponents to denote powers of 10.

5.NBT.A.3: Read, write, and compare decimals to thousandths.

a. Read and write decimals to thousandths using base-ten numerals, number names, and expanded form, e.g., 347.392 = 3 × 100 + 4 × 10 + 7 × 1 + 3 × (1/10) + 9 × (1/100) + 2 × (1/1000).

b. Compare two decimals to thousandths based on meanings of the digits in each place, using >, =, and < symbols to record the results of comparisons.

5.NBT.A.4: Use place value understanding to round decimals to any place.

Perform operations with multi-digit whole numbers and with decimals to hundredths.

5.NBT.B.5: Fluently multiply multi-digit whole numbers using the standard algorithm.

5.NBT.B.6: Find whole-number quotients of whole numbers with up to four-digit dividends and two-digit divisors, using strategies based on place value, the properties of operations, and/or the relationship between multiplication and division. Illustrate and explain the calculation by using equations, rectangular arrays, and/or area models.

5.NBT.B.7: Add, subtract, multiply, and divide decimals to hundredths, using

5.NF.B.4: Apply and extend previous understandings of multipli a fraction or whole number by a fraction.

a. Interpret the product (*a*/*b*) × *q* as *a* parts of a parti equal parts; equivalently, as the result of a seque *a* × *q* ÷ *b*. *For example, use a visual fraction mod 4 = 8/3, and create a story context for this equatio with (2/3) × (4/5) = 8/15. (In general, (a/b) × (c/d)*

b. Find the area of a rectangle with fractional side le with unit squares of the appropriate unit fraction s show that the area is the same as would be found the side lengths. Multiply fractional side lengths to rectangles, and represent fraction products as rec

5.NF.B.5: Interpret multiplication as scaling (resizing), by:

a. Comparing the size of a product to the size of one basis of the size of the other factor, without perfo indicated multiplication.

b. Explaining why multiplying a given number by a fr than 1 results in a product greater than the given (recognizing multiplication by whole numbers gre familiar case); explaining why multiplying a given fraction less than 1 results in a product smaller th number; and relating the principle of fraction equi (n×a)/(n×b) to the effect of multiplying a/b by 1.

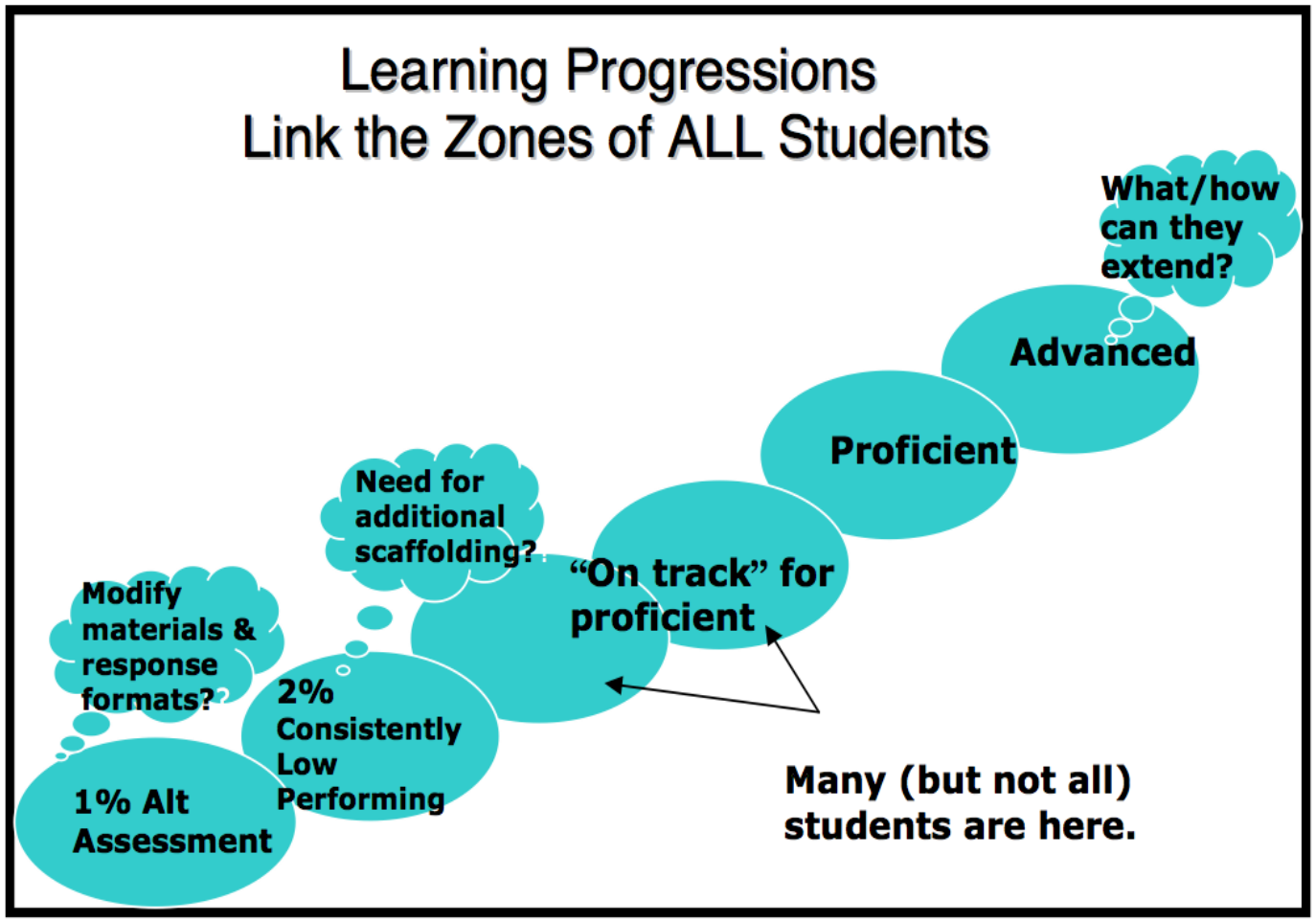
5.NF.B.6: Solve real world problems involving multiplication of fr mixed numbers, e.g., by using visual fraction models represent the problem.

5.NF.B.7: Apply and extend previous understandings of division fractions by whole numbers and whole numbers by u (Note: Students able to multiply fractions in general c strategies to divide fractions in general, by reasoning relationship between multiplication and division. But c

http://www.azed.gov/azccrs/files/2013/11/grade-5-placemat-11-2013.pdf

AZCCRS Mathematics Coding

Example – High School


Learning Progressions
Link the Zones of ALL Students
What/how can they extend?
Advanced
Proficient
"On track" for proficient
Need for additional scaffolding?
2% Consistently Low Performing
Modify materials & response formats?
1% Alt Assessment
Many (but not all) students are here.

Learning Progressions

Learning progressions connect the “learning zones” of a range of learners within a classroom or grade level. **Different instructional materials and strategies** will be used by teachers at different points along the learning pathway, but progress is seen as a continuum of learning.

Hess, Karen. *Developing and Using Learning Progressions as a schema for Measuring Progress*. National Center for Assessment. 2008.

The Learning Progressions Frameworks (LPF) Development Process

The approach used to identify the content progressions and specific

standards considered three important dimensions:

1. Identify specific content standards that represent a way to organize **essential learning** for all students.
2. Identify the **"enduring understandings"** for each content standard.
3. Articulate what the learning targets would look like if students were demonstrating achievement of the enduring understandings at the end of each grade span (K-4, 5-8, and 9-12).
4. The grade span learning targets for each strand are stated as broader **performance indicators.**

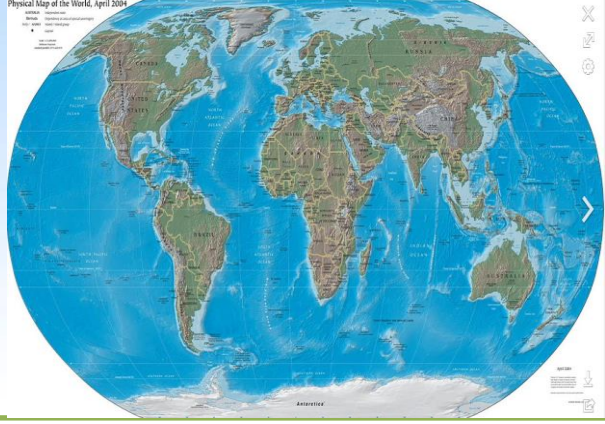
The Six Major LPF Strands

"For each content area, these essential threads [strands] Interact to build greater understanding of the discipline over time.

Identifying a small number of essential threads makes the learning progression manageable for the classroom teacher in terms of tracking ongoing progress in the classroom"

(Hess, 2008, p 8).

The Six Major LPF Strands



In other words, the LPFs should be thought of as a general map for learning, not a single route to a destination.

The Six Major LPF Strands

1. Symbolic Expression (SE)
2. The Nature of Numbers & Operations (NO)
3. Measurement (ME)
4. Patterns, Relations, & Functions (PFR)
5. Geometry (GM)
6. Data Analysis, Probability, & Statistics (DPS)

Learning Progressions Framework

Middle School (Grades 5-8) Learning Targets, Progress Indicators, & Common Core Standards

Symbolic Expression (SE): The use and manipulation of symbols and expressions provide a variety of representations for solving problems and expressing mathematical concepts, relationships, and reasoning.

M.SE-1 *Represent relationships and interpret expressions and equations in terms of a given context for determining an unknown value. Represent mathematical relationships symbolically and solve for any variable (for 1st degree equations and for common formula (literal equation); Explain how to manipulate an algebraic expression to create equivalent expressions and provide step-by-step explanations and justifications.*

Progress Indicators for Grades 5-6	Grade 5 CCSS standards	Grade 6 CCSS standards
M.SE.1a using symbols (=, >, <) to compare whole numbers, fractions, or decimals; write equations; and express inverse or related operations **5.NBT-3b**	**5.NBT-3b** **3.** Read, write, and compare decimals to thousandths. b. Compare two decimals to thousandths based on meanings of the digits in each place, using >, =, and < symbols to record the results of comparisons.	*No specific Common Core Standards have been linked to this Progress Indicator at this grade level; however, instruction should include these skills/concepts as part of the "hypothesized" learning continuum.*
M.SE.1b writing, interpreting, and using expressions, equations, and inequalities (including using brackets, parentheses, or braces) **5.OA-1, 2** **6.EE-2a, 2b, 6, 8, 9**	**5.OA-1, 2** **1.** Use parentheses, brackets, or braces in numerical expressions, and evaluate expressions with these symbols. **2.** Write simple expressions that record calculations with numbers, and interpret numerical expressions without evaluating them. *For example, express the calculation "add 8 and 7, then multiply by 2" as 2 × (8 + 7). Recognize that 3 × (18932 + 921) is three times as large as 18932 + 921, without having to calculate the indicated sum or product.*	**6.EE-2a, 2b, 6, 8, 9** **2.** Write, read, and evaluate expressions in which letters stand for numbers. **a.** Write expressions that record operations with numbers and with letters standing for numbers. *For example, express the calculation "Subtract y from 5" as 5 – y.* **b.** Identify parts of an expression using mathematical terms (sum, term, product, factor, quotient, coefficient); view one or more parts of an expression as a single entity. *For example, describe the expression 2 (8 + 7) as a product of two factors; view (8 + 7) as both a single entity and a sum of two terms.* **6.** Use variables to represent numbers and write expressions when solving a real-world or mathematical problem; understand that a variable can represent an unknown number, or, depending on the purpose at hand, any number in a specified set. **8.** Write an inequality of the form $x > c$ or $x < c$ to represent a constraint or condition in a real-world or mathematical problem. Recognize that inequalities of the form $x > c$ or $x < c$ have infinitely many solutions; represent solutions of such inequalities on number line diagrams. **9.** Use variables to represent two quantities in a real-world problem that change in relationship to one another; write an equation to express one quantity, thought of as

NO: Understandings of number - "how many" or "how much" – and number types extend applications of arithmetic properties, operations, and number systems and guide use of computational strategies and algorithms.

The statement of enduring understanding across grade spans states WHY learning the skills and concepts (and standards) listed below are important and how they are generally applied.

(K-4) Elementary School Learning Targets

E.NO-2 *Build an understanding of computational strategies and algorithms:*

- *Fluently add, subtract, multiply, divide, and estimate;*
- *Perform and represent operations with whole numbers, fractions, and mixed numbers;*
- *Identify multiples and factors of whole numbers.*

K-4 Elementary School Grade Span Learning Targets

- By the end of grade 4, students demonstrate and apply the skills and concepts related to Numbers & Operations in a variety of situations or problem solving contexts.
- Learning targets are the more general/broad performance descriptors associated with specific skills and concepts at each grade level.

Larger grade spans are then broken into smaller grade spans

Grades K-2

Build understanding and fluency with operations…

E.NO.2a representing addition and subtraction in multiple ways (composing/decomposing numbers, diagrams, using objects, arrays, equations, number lines), including regrouping

K.OA-1, 2, 3, 4; K.NBT-1

1.OA-1, 2, 5, 6; 1.NBT-4, 5, 6
2.OA-1, 4; 2.NBT-7

E.NO.2b explaining or modeling the relationship between addition and subtraction
1.OA-3, 4
2.NBT-5, 7, 9

E.NO.2c working flexibly with common addition and subtraction situations
K. OA-2
1. OA-3, 5, 6, 8
2.OA-1, 2; 2.NBT- 2, 5, 7

Grades 3-4

Build understanding and fluency with operations…

E.NO.2d modeling multiplication (equal-sized groups, arrays, area models, equal-sized jumps on number lines, multiplicative comparisons) and division (successive subtraction, partitioning, sharing) of whole numbers
3.OA-1, 2, 3, 4, 5
4.OA-1, 2, 3; 4.NBT- 5, 6

E.NO.2e describing relationships between addition-multiplication; multiplication-division; addition-subtraction; why commutativity does not apply to subtraction or division
3.OA-7, 9; 3.NBT-2
4.OA-2

E.NO.2f identifying factors and multiples of numbers
3.OA-6
4.OA-4

E.NO.2g recognizing fractions as one number/one quantity, rather than two numbers (numerator and denominator) and using number lines to represent magnitude of fractions
3.NF-1, 2, 3a, 3c

What you see articulated in this sample LPF strand:

- "E" denotes all Elementary (K-4) progress indicators.
- Most LPF progress indicators are stated in a more general way (e.g., using many related strategies; using both addition and subtraction) than a single *CCSS* standard; therefore progress indicators (PIs) often align with several *CCSS* standards at different grade levels within the grade span. This multi-standard alignment can provide insights into potential "mini progressions" for lesson design.
- Numerous *CCSS* standards align with the first descriptor under K-2 and can be interpreted that this progress indicator embodies many important foundational skills for all three grade levels, K, 1, and 2. Teachers at all of these grades may need to revisit lower grade level skills (and standards) for students needing reinforcement/ extra work on these prerequisite skills.
- K students would spend most of their school year working on *CCSS* standards: K.OA-1, 2, 3, 4; and K.NBT-1 (linked to the first PI), while grades 1 and 2 would be addressing all three PIs and the associated *CCSS* standards in this general/a-b-c order.

Text in blue denotes links to *CCSS* standards:
2.OA-1,2 means grade 2, Operations & Algebraic Thinking, standards 1 and 2
(See p. 19 of CCSS for mathematics)

Measureable Annual Goals - Review

- Choose a AZCCRS standard for a grade level you teach.
- Find that standard in the color-coded Math document.
- How do the following topics integrate into the standards/IEP Development?
  1. Communicative Competence
  2. Self-Advocacy
  3. Self-Determination
  4. Executive Functions
  5. Social/Emotional Learning
  6. AZCCRS-Aligned Behaviors/Expectations

IEP Development

- Present Level of Academic Achievement and Functional Performance (PLAAFP)
- Special Factors
- Goals and Objectives

Educational Benefit and the IEP

Assessment	Present Performance	Identified Needs	Goals	Services	Progress
RESULTS USED TO DETERMINE PRESENT LEVELS, IDENTIFY NEEDS, AND DEVELOP GOALS • All assessments are complete (each area of suspected disability) • Student educational needs are identified • Student strengths are identified • Can baseline data be established? PURPOSES: To determine whether a child is a child with a disability and to identify the educational needs of the child. Is the assessment complete and identify the student's needs?	PLOP/PLAAFP ADDRESSES EACH AREA ASSESSED AND IDENTIFIES NEEDS • A descriptive narrative summary (the most relevant information) • Areas not assessed or not a concern documented as such • Educational concerns of parent documented Academic, Communication, Gross/Fine Motor, Social/Emotional/ Behavioral, Health, Vocational, Self-Help Does the present performance include all of the needs identified in the assessment?	SPECIAL FACTORS IDENTIFIES ALL NEEDS FROM ASSESSMENT DATA AND PLOP/PLAAFP • Examples: Academic (Reading, Written Lang., Math), Social, Behavioral, Independence, Vocational, etc. • Identified needs may also include areas such as low incidence, blind/visually impaired, deaf/hard of hearing, assistive technology, EL related to IEP planning • A goal/objectives must be written for every identified need.	GOAL/OBJECTIVES DEVELOPED IN EACH AREA OF IDENTIFIED NEED • Baseline: quantifiable description of classroom performance in the specified areas • Progress reported and documented at noted intervals to parents • Goals/objectives are "linguistically appropriate"? Goals/obj. contain: WHO: DOES WHAT: WHEN: GIVEN WHAT: HOW MUCH: MEASURED: Are all of the student's needs addressed by appropriate goals and objectives?	SERVICES AND SUPPORTS THAT WOULD PROVIDE PROGRESS TOWARD GOALS & ED. BENEFIT. • Services determined after goals/obj. have been finalized • Decisions must be made in conformity of LRE • Allows student, to the maximum extent appropriate, to be educated with typically developing peers and access to core curriculum. Do the services support the goals and objectives?	• Need to measure progress (at each progress reporting period) and adjust when necessary • Determine if you need an IEP meeting to adjust • Measurements will vary depending on goals • May include informal and formal assessment results, classroom progress in academics and behavior, grades, progress on goals Did the student make yearly progress and if not, were the goals, objectives and services changed in the next IEP to assist the student in making progress?

Present Levels of Academic Achievement and Functional Performance (PLAAFP)

- A brief, detailed description of a student's achievement and performance at the time the IEP is written
- Includes all areas affected by the disability as well as parent concerns
- Lays the foundation for all other components of the IEP

Present Levels of Academic Achievement and Functional Performance (PLAAFP)

Parent Concerns

W.Y.L.

Present Levels of Academic Achievement and Functional Performance (PLAAFP)

- Direct correlation between assessment data, identified needs, goals, services, and accommodations
- Establishes the baseline, that will be used to gauge measurable annual goals/benchmarks
- Anyone who reads the PLAAFP should have an understanding of a student's strengths, areas of need, be able to plan standards-based instruction, and develop goals

Present Levels of Academic Achievement and Functional Performance (PLAAFP)

Each area contains at minimum:

- Assessments used and results
- Strengths of the student
- Needs of the student
- How the disability affects progress and involvement in general education

Present Levels of Academic Achievement and Functional Performance (PLAAFP)

Based on a review of curriculum-based assessments, Kevin's work samples resulting from weekly writing prompts using a scoring rubric, it is noted that student is able to spell grade level words accurately at 80%. Although sentences are in basic subject/verb format, Kevin is able relate meaning to the reader using legible handwriting. Organization and structure of paragraph are a concern and Kevin is able to write a 5 sentence paragraph and 4 supporting sentences in 1 of 5 trials. Kevin's written language skills impact writing assignments in all subject areas.

Considerations of Special Factors

If needed, refer to PLAAFP, goals, services, supports, or accommodations and modifications.

Considerations of Special Factors

Assistive Technology

- Consider whether the student needs AT devices and services. AT can consist of low-tech, mid-tech, and high tech devices ranging from pencil grips to computers to sophisticated communication devices.
- AT should also be addressed in the Supplemental Aids and Services section and reflected in goals.

Considerations of Special Factors

Communication Needs

- Consider the communication needs of the student.
- Include opportunities for direct communication with peers and professional personnel and how instruction can be accommodated or modified to meet the student's needs.

Considerations of Special Factors

Behavior

- Consider how the student's behavior affects his or her learning or disrupts the learning environment of others.
- Develop and implement positive behavior interventions and supports that will address the behavior and identify how progress will be monitored.

Considerations of Special Factors

Limited English Proficiency (LEP)

- Consider what supports and strategies the student will need to address limited English Proficiency.
- LEP support can be addressed within the general education system or by direct instruction within the special education program.

Considerations of Special Factors

Deaf/Hard of Hearing

- Consider the student's language and communication needs including opportunities for direct communication with peers and professional personnel.
- Include other opportunities for direct instruction in the student's language and communication mode.

Considerations of Special Factors

Blind/Visually Impaired

- Provide instruction in Braille and in the use of Braille unless the IEP team determines that instruction in, or use of, Braille is not appropriate for the student.
- Evaluate the student's reading and writing skills, identifying student needs, and determining appropriate reading and writing media.

Areas of Identified Need

- Indicate areas of educational need that have been identified by the IEP Team based on assessments and present levels of academic achievement and functional performance and/or special factors.
- For every identified area of need there must be a goal.

Measurable Annual Goals Overview

- Reflect and align with previous year's goals
- Relate to PLAAFP information
- Aligned to grade level AZCCRS and, as appropriate, student's measurable postsecondary goals and transition services

Measurable Annual Goals Overview

- Written in measureable terms
- Enable the student to be involved in and progress in the general curriculum
- Describe only what the student can reasonably accomplish within one year

Measurable Annual Goals Process

- Review progress/mastery of goals in previous IEP to create alignment.
- With the PLAAFP information, Special Factors, and prioritized areas of need in mind, begin by identifying age-appropriate expectations (CCSS at grade level, for example).
- Once the standard is chosen, determine how the student's skill deficit affects involvement and progress in the general education curriculum.

Measurable Annual Goals Process

- Determine the essential elements of the standard and the way in which student will access and master the skill.

- Include clear, succinct language in objective, quantifiable terms that would be interpreted the same by anyone who reads it.

Measurable Annual Goal Components

By when (date): _____

Who (student): _____

When given/Under what conditions: _____

Does what (behavior): _____

As measured by: _____

At what mastery level:_____

Objectives/Benchmarks

A Progression Toward Independence

Increase complexity and decrease level of supports (appropriately)	Level of mastery
Text read to student…	80%
High interest paragraph read by student…	80%
Assigned paragraph read by student…	90%

Measureable Annual Goals - Practice

1. Review your template using the “13 Goal Writing Considerations for IEPs”
2. Using an IEP, determine PLAAFP information
3. Identify one area of need
4. Refer to grade level standards in the area of need
5. Task analyze the expectations within the standard chosen
6. Choose the specific skill within the standard on which to focus
7. Project forward…

Measureable Annual Goals - Practice

1. Complete the AZCCRS Goal Writing Progression Template
2. Note the the projected AZCCRS, PLAAFP, Special Factors, and Area of Need
3. Begin with the Goal section and complete the template
4. The “Does What” is observable and measurable focusing on increased skill (Blooms Taxonomy)
5. The “Given What” increases independence
6. The “Level of Mastery” remains high
7. Find another team and present your “thinking” in developing your goals and objectives/benchmarks.